"Currently Amended" Claims

We claim:

1. A method of processing for intraocular implants and medical devices using hydrophobic core copolymers with a surface coating of biocompatible hydrophilic polymer.
2. The method of Claim 1, wherein said the Intraocular implants are the foldable Intraocular Lenses (IOL's) and other ophthalmic implants such as implantable contact lenses, keratoprostheses, and corneal rings or inlay.
3. The method of Claim 1, wherein said the medical devices are catheters, vascular grafts or stents, artificial joints, medical devices for blood oxygenation, dialysis, coronary artery implants, femorofemoral artery implants, femoral-poplitial artery implants, femoro-tibial artery implants, fibular artery implants, plantar artery implants, dorsalis-pedis artery implants, arterial-venous fistulae, and venous implants.
4. The method of Claim 1, wherein said the hydrophobic core copolymers having an elongation of at least 150%, comprising a total of at least 90% by weight of two principal monomers, wherein one principal core monomer is an aryl acrylic hydrophobic monomer described in figure 1 wherein: R is hydrogen or methyl group, n is 0 to 7. Ar is any aromatic ring which is unsubstituted or substituted with F. Cl, Br, I, OCH_3, OCH_2CH_3, or Alkyl groups such as CH_3, CH_2CH_3, propyl, i-propyl or butyl groups; X is nothing, O, S, or NR where in R is H, CH_2CH_3, $CH_2C_6H_5$. The other monomer, present in an amount not greater than 10% of the aryl acrylic hydrophobic monomer, is a cross-linking monomer.
5. The method of Claim 1, wherein said the copolymers have UV-light absorbing, and/or other light absorbing components added into the core hydrophobic monomers.
6. The method of Claim 1, wherein said the hydrophobic core copolymers are processed to the desired forms and shapes and then a biocompatible hydrophilic

polymer is processed onto the core acrylic polymer. The general chemical structures of these biocompatible hydrophilic monomers is described in figure 2 wherein R_1 & R_2 are functional groups such as NR, F, Cl, Br, I, OCH_3, OCH_2CH_3, or Alkyl groups such as CH_3, CH_2CH_3, propyl, i-propyl or butyl groups; M is 10 to 1000.

7. The method of Claim 1, wherein the intraocular implants can be prepared by individually machining or produced by injection molding.
8. The method of Claim 1, wherein the surface coating of biocompatible hydrophilic polymer can be activated using conjugation chemical reactions for the covalently attachment of commercially available pharmacologically active chemicals.
9. The method of claim 8, wherein said the pharmacologically active chemicals are anti-coagulant drugs, anti-cancer drugs, Vascular Endothelial Growth Factor (VEGF) and/or Platelet Derived Growth Factor (PDGF) which include, but not limited to heparin, Taxol, and angiogenesis factor is selected from the group consisting of VEGF, VEGF 2, bFGF, VEGF121, VEGF165, VEGF189, VEGF206, PDGF, PDAF, TGF-B, PDEGF, PDWHF.
10. The method of Claim 8, wherein said the bio-compatible surface processed copolymers can covalently attached with cells from specific tissue or cell lines to create special biological effects, such as endothelium cells to reduce blood activation, and other unwanted or harmful biological activities.